

ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION

1989 NONPOINT SOURCE WATER QUALITY ASSESSMENT

*** WATERBODY ***

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Name of Waterbody: LAKE OTIS

Location or Lat/Long: Near Anchorage

Waterbody Type: River/Stream
 Lake
 Fresh Wetland
 Tidal Wetland
 Estuary
 Coastal Shoreline
 Groundwater

Waterbody Size: _____ Miles
9 Acres/Hectares
 _____ Acres/Hectares
 _____ Acres/Hectares
 _____ Square Miles
 _____ Square Miles

ADEC USE ONLY
 304i: N L M S
 WQL: 0 - N
 1 - FS
 2 - NPS
 3 - WQS
 4 - Con/Enh
 ID#: _____

Segment of Waterbody Addressed:
 From: _____
 To: _____
 Other Description: _____
 Size of Segment: _____

USGS Hydrologic Unit #: AK 190 -20401-413

*** ASSESSMENT ***

Describe Source of Pollution and Documentation Provided:
Urban runoff. monitoring by MOA/DHHS

Type of Documentation (Attached If Possible):
 Water quality data
 Documented oil spill
 Enforcement action
 Photos with documentation
 Photos without documentation

Written report
 Field notes
 Overflight
 Observation
 Other

Assessment type:
 Monitored
 Evaluated

Violation of Water Quality Standards:
 Past Violation Documented
 Current Violation Documented
 Current Violation Suspected
 Future Violation Projected

Waterbody Status:
 Impaired - Past
 Impaired - Current
 Suspected
 Unimpaired

Comments: _____

Author of This Assessment: James Cross Affiliation: MOA/DHHS Date: 88/04
CHRIS KENT ADEC/EO/WQM 8/89
 YV/MM

Meets Clean Water Act Goals:

<input checked="" type="checkbox"/> Fishable	<input type="checkbox"/> Swimmable
<input type="checkbox"/> Not Fishable	<input checked="" type="checkbox"/> Not Swimmable
<input type="checkbox"/> Fishable Not Attainable	<input type="checkbox"/> Swimmable Not Attainable

Impaired Uses:

<u>FRESHWATER</u>	<u>MARINE</u>
<input checked="" type="checkbox"/> Drinking	<input type="checkbox"/> Aquaculture
<input type="checkbox"/> Agriculture	<input type="checkbox"/> Seafood Processing
<input type="checkbox"/> Aquaculture	<input type="checkbox"/> Industry
<input type="checkbox"/> Industry	<input type="checkbox"/> Recreation, Contact
<input checked="" type="checkbox"/> Recreation, Contact	<input type="checkbox"/> Recreation, Secondary
<input checked="" type="checkbox"/> Recreation, Secondary	<input type="checkbox"/> Fish, Shellfish, Wildlife
<input type="checkbox"/> Fish, Shellfish, Wildlife	<input type="checkbox"/> Harvest of Fish, Shellfish

Support of Designated Uses:

- One or More Uses Not Supported (Impaired)
- One or More Uses Partially Supported (Partially Impaired)
- One or More Uses Suspected to Be Affected (Suspected)
- One or More Uses Projected to Become Affected (Projected)
- All Uses Fully Supported, sources present (Unimpaired)
- All Uses Fully Supported, no sources present (Unimpaired)

Trophic Status:	Trophic Trend
<input type="checkbox"/> Oligatrophic	<input type="checkbox"/> Improving
<input checked="" type="checkbox"/> Mesatrophic	<input checked="" type="checkbox"/> Stable
<input type="checkbox"/> Eutrophic	<input type="checkbox"/> Deteriorating
<input type="checkbox"/> Hypereutrophic	
<input type="checkbox"/> Dystrophic	
<input type="checkbox"/> Unknown	

*** TOXICS ***

Monitored for Toxics: Yes No

Type of Toxics Monitoring:

<input type="checkbox"/> 1 Organics in water column	<input type="checkbox"/> 10 Metals in sediments
<input type="checkbox"/> 2 Organics in sediments	<input type="checkbox"/> 11 Metals in fish tissue
<input type="checkbox"/> 3 Organics in fish tissue	<input type="checkbox"/> 12 Metals in discharges
<input type="checkbox"/> 4 Organics in discharges	<input type="checkbox"/> 13 Other inorganics in water column
<input type="checkbox"/> 5 Pesticides in water column	<input type="checkbox"/> 99 Other inorganics in sediments
<input type="checkbox"/> 6 Pesticides in sediments	<input type="checkbox"/> 99 Other inorganics in fish tissue
<input type="checkbox"/> 7 Pesticides in fish tissue	<input type="checkbox"/> 14 Other inorganics in discharges
<input type="checkbox"/> 8 Pesticides in discharges	<input type="checkbox"/> 15 Toxicity testing of water column
<input type="checkbox"/> 9 Metals in water column	<input type="checkbox"/> 16 Toxicity testing of sediments
	<input type="checkbox"/> 17 Toxicity testing of discharges

Fish and Shellfish Contamination:

- 0 None detected
- 1 Contaminated fish
- 2 Fishing advisory
- 3 Fishing ban
- 4 Fish abnormalities
- 5 Shellfish restrictions due to pathogens
- 6 Fish kill

Pollutants: (H = High, M = Medium, S = Slight)

- | | | |
|--|--|---|
| <input type="checkbox"/> 0 Cause Unknown | | |
| <input type="checkbox"/> 1 Unknown toxicity | | |
| <input type="checkbox"/> 2 Pesticides | Type _____ | |
| <input type="checkbox"/> 3 Priority organics | Type _____ | |
| <input type="checkbox"/> 4 Nonpriority organics | Type _____ | |
| <input type="checkbox"/> 5 Metals | Type _____ | |
| <input type="checkbox"/> 6 Ammonia | <input type="checkbox"/> 12 Organic enrichment | <input type="checkbox"/> 18 Radiation |
| <input type="checkbox"/> 7 Chlorine | <input type="checkbox"/> 13 Salinity/TDS/Chlorides | <input type="checkbox"/> 19 Oil and Grease |
| <input type="checkbox"/> 8 Other inorganics | <input type="checkbox"/> 14 Thermal modifications | <input type="checkbox"/> 20 Taste and Odor |
| <input type="checkbox"/> 9 Nutrients | <input type="checkbox"/> 15 Flow alteration | <input checked="" type="checkbox"/> 21 Suspended solids |
| <input type="checkbox"/> 10 pH | <input type="checkbox"/> 16 Habitat alteration | <input type="checkbox"/> 22 Noxious aquatic plants |
| <input checked="" type="checkbox"/> 11 Siltation | <input checked="" type="checkbox"/> 17 Pathogens | <input type="checkbox"/> 23 Filling and draining |

Sources of Pollutants: (H = High, M = Medium, S = Slight)

Point Sources

- 1 Industrial
- 2 Municipal
- 3 Municipal pretreatment
- 4 Combined sewers
- 5 Storm sewers
- 6 Other dischargers

Resource extraction/exploration

- 51 Surface mining
- 52 Subsurface mining
- 53 Placer mining
- 54 Dredge mining
- 55 Petroleum activities
- 56 Mill tailings
- 57 Mine tailings

Nonpoint Sources

- 9 Unspecified

Land Disposal (Permitted Activities)

- 61 Sludge
- 62 Wastewater
- 63 Landfills
- 64 Industrial land treatment
- 65 Onsite wastewater systems
- 66 Hazardous waste
- 67 Septage disposal

Agriculture

- 11 Non-irrigated crop production
- 12 Irrigated crop production
- 13 Specialty crop production
- 14 Pasture land
- 15 Range land
- 16 Feedlots
- 17 Aquaculture
- 18 Animal holding areas
- 19 Manure lagoons

Hydrologic Modification

- 71 Channelization
- 72 Dredging
- 73 Dam construction
- 74 Flow regulation/modification
- 75 Bridge construction
- 76 Removal of riparian vegetation
- 77 Streambank modification
- 78 Draining/filling of wetlands

Silviculture

- 21 Harvest, restoration
- 22 Forest management
- 23 Road construction/maintenance

Other

- 81 Atmospheric deposition
- 82 Waste storage/storage tank leaks
- 83 Highway maintenance and runoff
- 84 Spills
- 85 In-place contaminants
- 86 Natural
- 87 Recreational activities
- 88 Upstream impoundment
- 89 Salt storage sites
- 99 Septic tank seepage

Construction

- 31 Highway/road/bridge
- 32 Land development

Urban Runoff

- 41 Storm sewers
- 42 Combined sewers
- 43 Surface runoff

Source Unknown

- 90 Source Unknown

DESCRIBE POLLUTANTS AND POLLUTANT SOURCES. THE BASIS FOR THE DETERMINATION THAT A WATERBODY IS IMPAIRED MUST BE EXPLAINED IN THIS SECTION. DESCRIBE THE NATURE OF THE VIOLATION OF WATER QUALITY STANDARDS, INCLUDING DATA OR OTHER DOCUMENTATION IN RELATION TO STANDARDS. ALSO DESCRIBE WHETHER THE VIOLATION IS CONSIDERED PAST OR CURRENT, AND OTHER RELEVANT INFORMATION.

Lake Otis monitoring data by MOA/DHHS for years 8/86 thru 10/87

Point Sources:

NPDES Permit Number: _____
NPDES Permit Name: _____
Causes Nonattainment: Yes No
Pollutant: _____

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NPDES Permit Name: _____
Causes Nonattainment: Yes No
Pollutant: _____

Nonpoint Sources:

Nonpoint Source Name: _____
Nonpoint Source Type: _____
Nonpoint Source Description: _____

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